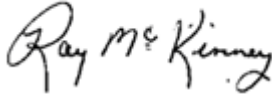


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(Reissue of P04-V-6)

PROGRAM POLICY LETTER NO. P06-V-7

FROM: RAY McKINNEY  
Administrator for  
Coal Mine Safety and Health



SUBJECT: Methane Tests for Welding, Soldering or Cutting With Arc or Flame  
Underground

### **Scope**

Coal mine operators, miners and miners' representatives, Mine Safety and Health Administration (MSHA) enforcement personnel, and other interested parties should have this information.

### **Purpose**

This program policy letter clarifies MSHA policy (PPM, vol. V, 75.1106, pg. 111) concerning the methane testing requirements of Section 75.1106, Title 30 of the Code of Federal Regulations (CFR), applicable to welding, cutting, and soldering activities with arc or flame in underground areas of a coal mine.

### **Policy**

Welding, cutting, and soldering in an underground coal mine are inherently dangerous activities due to the presence of potentially explosive methane, explosive coal dusts and combustible coal. Open flames, molten metal, and sparks resulting from such activities may present an ignition source underground. Consequently, MSHA requires under 30 CFR Section 75.1106 that the following safety precautions be taken when any welding, cutting and soldering with arc or flame is conducted underground in other than a fireproof enclosure:

- Welding, cutting or soldering must be done under the supervision of a qualified person;
- The qualified person must conduct a diligent search for fire during and after any welding, cutting and soldering activity;

- The qualified person also must continuously test for methane immediately before and during any welding, cutting, or soldering activity;
- Any welding, cutting or soldering shall not be conducted in air that contains 1.0% or more of methane; and
- Rock dust or suitable fire extinguishers shall be immediately available during any welding, cutting or soldering activity.

While 30 CFR 75.323(a) specifies that tests for methane concentrations must be made at least 12 inches from the roof, face, ribs and floor, this distance requirement is not applicable to welding, cutting and soldering activities performed under 30 CFR 75.1106. MSHA's policy on 30 CFR 75.1106 clearly states that methane tests conducted under this section must be made in locations where methane is likely to exist, and in no case is cutting, welding or soldering permitted in an atmosphere that contains 1.0 % or more of methane. Since the face, roof, ribs, floors and any fully or partially enclosed areas of an underground coal mine are locations where methane is likely to exist, methane tests must also be made at or near the surface of these areas (not 12 inches away), and within any enclosed areas that may be exposed to the above ignition sources. Welding, cutting or soldering activities are prohibited if any methane levels are 1.0% or greater within the affected areas. Additional, or spot, ventilation may be used to reduce these methane levels. MSHA recommends that probes for methane detectors be used for some of these measurements.

### **Background**

Questions have been raised concerning the application of MSHA's policy on methane testing under 30 CFR 75.1106, Welding, Cutting, or Soldering with Arc or Flame Underground, and the "12-inch minimum distance requirement "for methane testing under 30 CFR 75.323(a), Actions for Excessive Methane. This program policy letter is being issued to address any confusion that may have resulted in enforcement inconsistencies regarding the application of the methane testing requirements of 30 CFR Sections 75.1106 and 75.323(a) to welding, cutting, and soldering activities underground.

### **Authority**

The Federal Mine Safety and Health Act of 1977, 30 CFR Section 75.323(a) and 30 CFR Section 75.1106.

### **Internet Availability**

This program policy letter may be viewed on the World Wide Web by accessing the MSHA home page (<http://www.msha.gov>) and by choosing "Compliance Info" and "Program Policy Letters".

**Contact Person(s)**

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